

Jardín Botánico Regional De Cadereyta “Ing. Manuel González De Cosío” (Cadereyta Regional Botanic Garden, MÉXICO)





BUCOLIC TALES FOR CHILDREN.

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The Cadereyta Regional Botanic Garden (CRBG)
is a small garden located in the State of Querétaro
in Central Mexico.





One of its goals is to teach the ecological and economic importance of plant resources of our State.



The CRBG is located in the arid zone of Queretaro and Hidalgo, at the southern end of the Chihuahuan Desert.

Mammillaria herrerae



*Strombocactus
corregidora*



Yucca queretaroensis



Thelocactus hastifer

*Echinocereus
schmollii*

Endemic species in the botanical collection of the CRBG.



The Cadereyta Regional Botanic Garden receives 20,000 visitors annually.



All of them are subject to a program of environmental education (EEP).

Visitors are served according to a basic protocol, centered on guided tours.



These individuals should take care of the environmental problems and should have appropriate tools to solve them, individually and collectively.

Learning theory is constructivist, and is based on principles such as:

- (1) People learn better participating in their own learning processes.
- (2) People learn better through direct experiences.
- (3) People learn better using their senses.
- (4) A new learning experience is based on a previous one.
- (5) Each person has particular and unique ways of processing information and experiences.
- (6) What you discover by yourself generates special encouragement and satisfaction.
- (7) Clear expectations should be given at the beginning of the learning process.





This programme works with 3000-4000 children per year.

The programme seeks a better understanding of our environment, and our role towards it.



For the younger, more complex concepts can be translated using of stories, which we call bucolic.

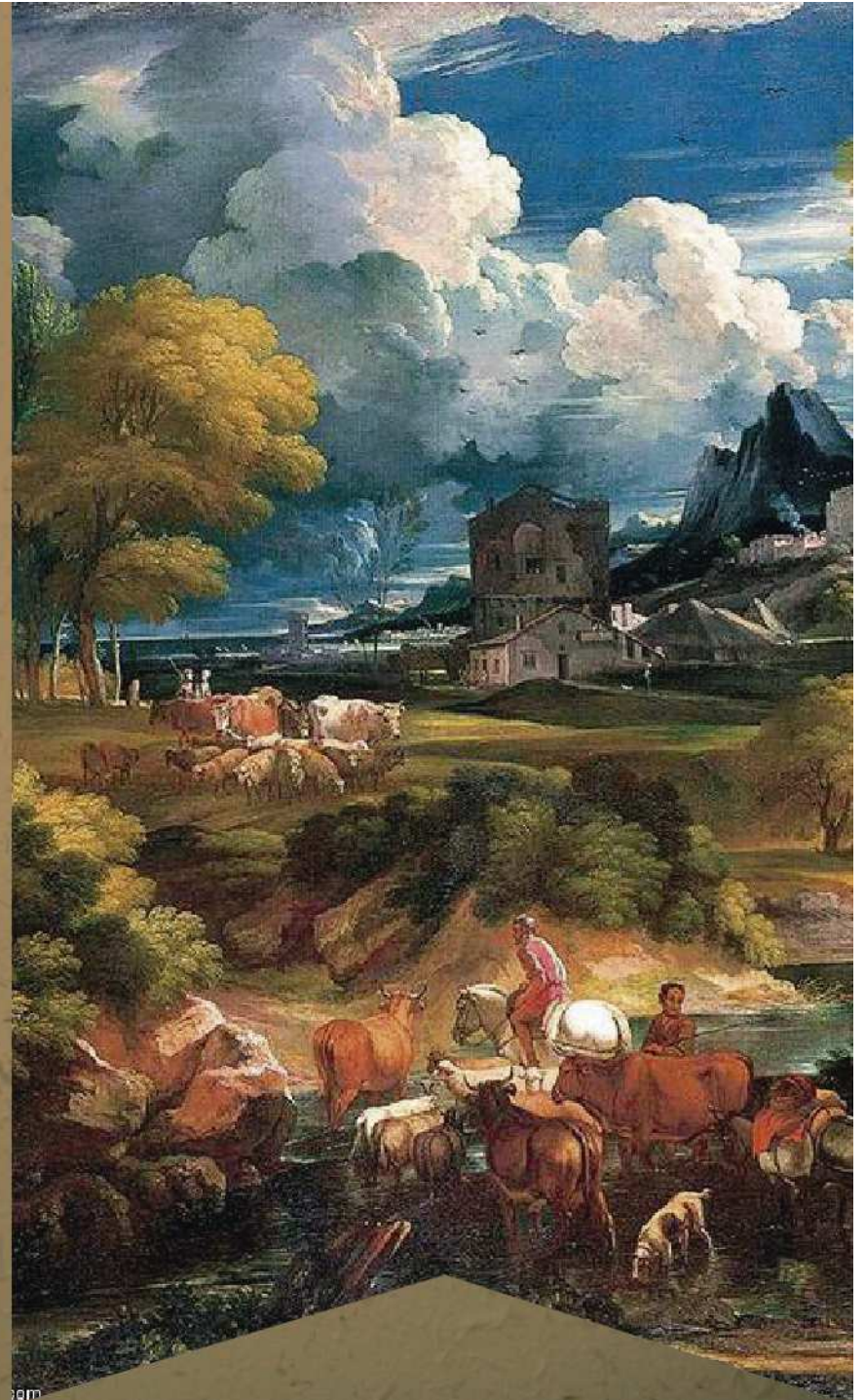
¿Botanic Garden?



Bucolic tales are a tool to convey concepts that all young humans need to rationalize.

The rhetoric of narrations is the basic practice to communicate stories.

At the botanical garden, the mind of the children receive an experience of the nature through this kind of stories.



The stories are adapted narratives that incorporate a bucolic style, to describe and assess nature, ethically and aesthetically.



The stories express that human beings need Nature, but Nature does not necessarily need us.

The benefits of using literary narratives in terms of the environmental education program may include, among others:

- a) They allow us convey ecological values through metaphors and allegories.
- b) They generate images that can strengthen the value of nature.
- c) They introduce children to the narrative logical thinking.
- d) They make valuable personal action and implements ideas of heroes of nature.
- e) They clarify complex concepts.
- f) They allow the learning of the basic ecological interactions.
- g) They allow more learning about the aesthetics of Nature.
- h) They are a pleasant manner to describe landscapes.

Educate through simple concepts presented in narratives in the form of stories may have a significant educational effect on future adult human beings regarding their conduct of respect for nature.



Example:

A story called BOTANIZING. It is the story of a poodle dog which together with his human friend visits a botanical garden to learn the scientific name of plants. The human child recites the little poodle a short poem (haiku) for each of them.

"Paper lantern, flashlight:
Illuminate this infinite journey"



Cardiospermum halicacabum



This is a Sapindaceae species abundant in our botanical garden which common name is paper lantern (farolito).

A second example

"The magic Comb of Shennongjia".

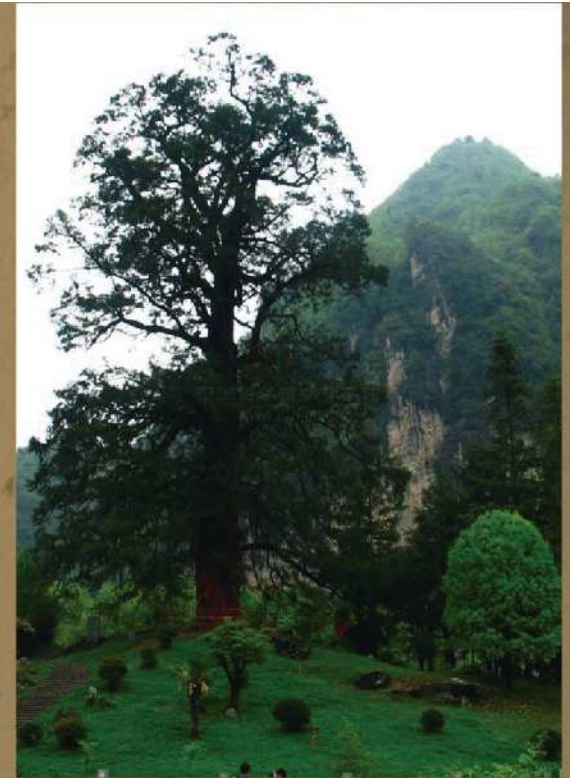
- It has as its central theme the importance of the mystic assets that the trees give us to preserve the order of the world in which we live.
- This so-called order is the precept of conservation of plant species.
- The setting of the story describes a route between Mexico and the sacred mountains of Shennongjia in China.
- This allows describing many landscapes with some of its most representative plants and animals.
- The story ends with the corollary that is the handling of nature with clear ideas which will allow its conservation and ecological stability.



Kateleeria davidiana is the species from which the magic combs of Shennongjia (China) are made of.

A fragment of this story :

“Just as they leave the thick forest of the Metasequoias, they could observe the purple mountain, the highest peak of the region, site, where it is said, many years ago, God Shennon, sacrificed himself to solve the problems of men. His immolation produced medicinal, healing plants and supplies that human being have used, for centuries, to live happily. That peak was Shennongjia”.



Keteleeria davidiana
(Pinaceae)



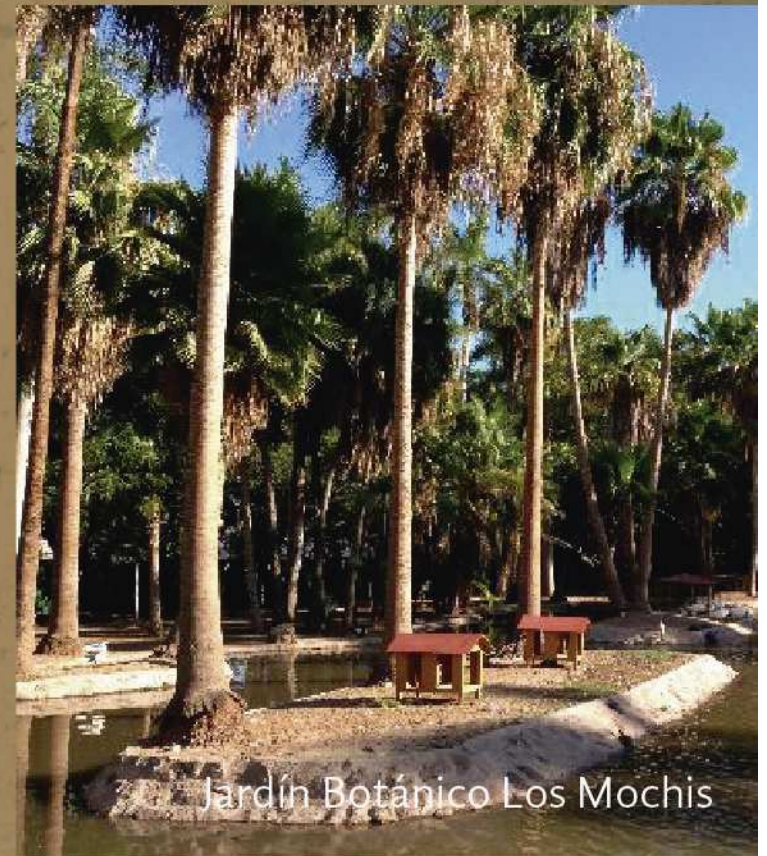
Many names of species of trees and plants in Mexico and China are managed throughout the narrative, with the desire that the audience becomes familiar with them.

Some of these stories have been included in digital material widely distributed in schools of Queretaro's State.



CONCLUSION

THE BASIC ECOLOGICAL CONCEPTS IMPORTANT TO UNDERSTAND NATURE IN OUR LAND ARE TRANSLATED INTO BUCOLIC TALES. THIS CAN BE ACHIEVED THROUGH THE NEWLY CREATED NETWORK FOR SCIENCE POPULARIZATION OF OUR STATE (QUERÉTARO) AND IN THE MORE THAN 40 BOTANICAL GARDENS OF MEXICO.



Jardín Botánico Los Mochis



Jardín Botánico IB-UNAM



Jardín Botánico Clavijero



Jardín Botánico El Charco del Ingenio



Jardín Botánico Regional de Cadereyta



Jardín Botánico de la BUAP

We believe that this can promote a culture of greater environmental literacy, as a means to achieve sustainability and environmental governance.



Acknowledgements

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Educating about Nature, naturalize education.

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Thank you

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